Water and Wastewater SOLUTIONS for
NATIVE AMERICAN COMMUNITIES
Who we are...

**Founded in Phoenix in 1933**, Carollo Engineers is a full service engineering consultant specializing in water and wastewater treatment systems and infrastructure.

**Our staff of 900+ employees** includes civil, structural, electrical, mechanical, environmental, and instrumentation and control engineers, as well as scientists, planners, architects, CAD designers, and construction managers. We are located in 38 offices across the U.S., and we are all dedicated to water.

What we believe...

**Water is our most precious resource.**

Water is sacred. It sustains life and is vital to the growth of community, industry, and economy. Water is all we do. It is our focus, our business, and our passion.
Services and Capabilities

Our Native American Services Group specializes in providing customized, cost-effective, and innovative services.

WORKING WITH TRIBES

• Native American services group provides local, dedicated experts and cultural training to all project team members.

• Practice discretion and preserve confidentiality regarding sensitive matters and information.

• Seek input from stakeholders, community elders, tribal members, and utility staff to understand project drivers and goals, and promote community insight and approval.

• Respect cultural values and traditions, and incorporate cultural or sacred components into planning, design, and construction.

• Support of Native American communities through involvement with economic development and community planning committees.

REGULATORY EXPERTISE

• Established relationships with the U.S. Bureau of Reclamation (USBR), U.S. Department of Agriculture (USDA), U.S. Environmental Protection Agency (EPA), Bureau of Indian Affairs (BIA), and Indian Health Services (IHS) to efficiently expedite projects and obtain funding when possible.

TECHNICAL SERVICES AND REGULATORY EXPERTISE

• Water supply, planning, and management.

• Water and wastewater treatment and infrastructure.

• Water reuse, recycling, and recharge design.

• Research and treatability evaluations.

• Alternative energy solutions.

• Integrated planning and business solutions.

• Construction management with start-up and training services.

• Permitting support and regulatory compliance assurance.

• Wetlands planning/restoration including native riparian restoration.
Native American Project Experience

Native American communities continue to face significant water challenges, but are also poised to play a leading role in the management of water resources throughout the United States. We work with tribes to deliver effective water management solutions that allow their communities to thrive today and for generations to come. Tribal projects represent some of our most respected and rewarding work. Below is a sampling of our recent projects.

**Ak-Chin Indian Community**

Carollo has worked with Ak-Chin on several projects including feasibility and rate studies, integrated master planning, facility upgrades, and Ak-Chin’s award winning 0.6-mgd Water Reclamation Facility and 2-mgd Surface Water Treatment Plant. Collectively, these capital improvements have supported development including hotel/casino expansion and Ak-Chin’s Mutitainment Center enterprise by providing reliable water/wastewater service and reusing water throughout the community. Carollo has been privileged to remain a trusted advisor to Ak-Chin, providing on-call services, and participating in community events and cultural celebrations.

**Pascua-Yaqui Tribe**

The Pascua Yaqui Tribe has worked diligently to establish a strong base for economic development and a high quality of living for its members. As part of this effort, Carollo has completed projects that help water and wastewater infrastructure meet current needs, provide opportunity for continued economic and community expansion, and maximize reuse opportunities throughout the New Pascua.

Projects have consisted of:
- Integrated water and wastewater preliminary engineering report/feasibility study, including O&M organization and development
- Design of a 0.5-mgd MBR Water Reclamation Facility that produces Class A+ Effluent
- Influent Force Main Construction Administration and Inspection Services

**Navajo Nation**

The Navajo Nation retained the Carollo Engineers- WH Pacific team to conduct eight cost firming investigations, including a pilot water treatment plant study at Halchita, Utah, to support future Mexican Hat to Katenta Water Project feasibility level studies. Carollo led efforts for the pilot study, San Juan River pipeline crossing, and addressing the surface-groundwater interface chemistry. Carollo worked closely with the NTUA operators and staff to complete these efforts.

**Yavapai-Apache Nation**

Carollo worked with the Yavapai-Apache Nation to evaluate future wastewater treatment options for the Nation’s Middle Verde community. The project team coordinated with Tribal Council, community members, operations staff, and other tribal departments to define the Nation’s water resource goals. Carollo’s Blue Plan-it® modeling tool was used to compare capabilities, costs, and site layouts for several treatment technologies. The resulting Planning Phase Report outlines Middle Verde’s water resource portfolio and effluent management approach, and recommends a water reclamation treatment method, including a preliminary process flow, cost estimate, and site layout.
White Mountain Apache Tribe (WMAT)

The WMAT is designing a new water delivery system including a dam, water treatment plant, and 60-mile distribution system to serve the combined communities of Whiteriver, Fort Apache, Canyon Day, Cedar Creek, Carrizo, and Cibeque. Carollo collaborated closely with the Tribal Utility Authority (TUA), IHS, and USBR to lead efforts addressing raw and treated water quality, hydraulics, capital costs, operation and maintenance costs, permitting, and land suitability and availability through:

- Water Treatment Plant Siting/Routing and Pilot Study
- Preliminary Design of the 14.5-mgd Water Treatment Plant

Carollo is also working with the TUA, EPA, and private entities to investigate wastewater treatment and regulatory compliance options at several existing wastewater treatment facilities. This includes data collection, system upgrades recommendations, and a multi-phased Preliminary Engineering Report.

Salt River Pima-Maricopa Indian Community (SRPMIC)

SRPMIC has continuously been proactive in managing and upgrading their community-wide water supply to reliably satisfy current and future water demands.

Carollo has assisted in creating a reliable potable water system and fire flow supply through the following projects:

- Well, storage, and distribution system upgrades
  - Water model/master plan update
  - Design, permitting, and engineering services during construction, treatment, storage, and distribution components
- Fire flow capacity improvements design, construction administration, and startup:
  - Water storage reservoir and booster pump station design/construction
  - Well upgrades and new well installation
  - Arsenic treatment and disinfection

Fort Yuma Quechan Indians

The Quechan Indian Tribe, through the Economic Development Administration and IHS, hired Carollo to complete a Preliminary Engineering Report (PER) to investigate wastewater treatment options for the Fort Yuma Indian Reservation in Winterhaven, California. The PER was completed according to USDA PER format to support future project funding from IHS or the USDA.
Trusted Water Experts for Reliable Solutions

Carollo provides an experienced and skilled planning, design, construction support, start-up, and commissioning team, ready to be your trusted advisor. Our top priority is to understand your needs and project goals, and deliver solutions serving your community’s best interests. For each project, we assemble a multidisciplinary team to collaborate with staff and project stakeholders to provide quality, responsive solutions for your water, wastewater, and water resource needs.

UNPARALLELED EXPERTISE

Water is our focus, our business, our passion. Unlike our competitors, water is all we do. Our staff includes civil, structural, electrical, mechanical, environmental, and instrumentation and control engineers, as well as scientists, planners, architects, CAD designers, and construction managers – all experts dedicated to water. This singular focus allows us to provide your project with the best and brightest water professionals who share your goals for protecting water supplies, delivering clean water to your community, and maintaining effective water management.

INNOVATIVE, VALUE-ADDED SOLUTIONS

Carollo’s Research Group supports projects with cutting-edge treatment technologies, improved operations practices, and insights on major trends in the water and wastewater industry. Our Sustainability Group rounds out our services with strategies that integrate sustainable principles into all we do.

Our trained problem-solvers are here to both assist your community in today’s challenges and help you face any obstacles that may arise in the future. We are industry leaders in developing creative and cost-effective solutions to complex water problems. Helping our clients develop practical, useful, and flexible plans to meet their goals and objectives is our mission.

SUPERIOR SERVICE AND PERFORMANCE

Engineering News Record consistently ranks Carollo among the nation’s top 20 design and environmental engineering firms. More importantly, many of our Native American projects are award winning due to our inclusive project development approach, and high quality, innovative and flexible solutions. We bring this level of service and performance to every project — day in and day out.
One Firm for All Your Water Management Needs
Many of our 42 offices are located near Native American territories, allowing us to provide local, dedicated teams to meet your complex water project needs.

ARIZONA
Phoenix
Tucson
Yuma

CALIFORNIA
Carlsbad
Fresno
Inland Empire
Los Angeles
Oceanside
Orange County
Roseville
Sacramento
San Diego
San Francisco
Sunnyvale
Walnut Creek

COLORADO
Broomfield
Fort Collins
Littleton

FLORIDA
Broward County
Miami
Orlando
Palm Beach
Sarasota
Tampa

HAWAII
Honolulu

IDAHO
Boise

ILLINOIS
Chicago

MASSACHUSETTS
Boston

MISSOURI
Kansas City

NEBRASKA
Omaha

NEW MEXICO
Albuquerque

NEVADA
Las Vegas
Reno

OKLAHOMA
Oklahoma City

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